K.R. MANGALAM UNIVERSITY
THE COMPLETE WORLD OF EDUCATION

Ref No: KRMU/Admin/O.O./2025-26/ 4529 **Dated: 05.08.2025**

OFFICE ORDER

Subject: Revised Ph.D. Coursework Structure w.e.f. Academic Year 2025–26 (Odd Semester Onwards).

In pursuance of the recommendations of the Research and Development Cell and with the approval of the competent authority, the revised structure of the Ph.D. Programme coursework shall be implemented from the Academic Session 2025–26 (Odd Semester onwards).

The following changes have been approved:

1. The Discipline Specific Course (Online Mode) will now carry 3 credits instead of 2.
2. The World Intellectual Property Organization (WIPO) Online Course carrying 1 credit has been discontinued, owing to consistent delays in certification, which adversely affected timely issuance of coursework grade sheets.

The total coursework credits remain unchanged at 14 credits, as per the approved structure. New Course Structure of PhD Programme with Proposed Changes

S. No.	Course Code	Course Title	L	T	P	C	Hours/ week	Total Hours Required
1	PPHD113	Research Methodology	4	-	-	4	4	60
2	PPHD115	Quantitative Techniques	3	-	-	3	3	45
3	PPHD117	Introduction to Pedagogy and Teaching	2	-	-	2	2	30
4	PPHD907A	Research and Publication Ethics	2	-	-	2	2	30
5	**PHDMO__**	**Discipline Specific Course (Online Mode)**	**-**	**-**	**-**	**3**	**-**	**45**
Total Credits						**14**		

The revised Ph.D. coursework structure is appended with this order for implementation and necessary action.

This is issued with the approval of the competent Authority.

Registrar
K R Mangalam University
Sohna Road, Gurugram (Haryana)

Registrar

Encl: Revised Ph.D. Coursework Structure (w.e.f. AY 2025–26)

Copy to:

- Vice Chancellor: For kind information
- Dean- Academic Affairs
- Dean-Research
- Controller of Examinations
- Associate Dean – Ph.D. Programme
- Dean/ School Coordinators
- All Faculty Members
- ERP Cell
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K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

Ph.D. Coursework Handbook

ACADEMIC YEAR: 2025-26

CONTENT

Ph.D. Programme Coursework Structure

SEMESTER-I

S. No.	Course Code	Course Title	L	T	P	C	Hours/ week	Total Hours Required
1	PPHD113	Research Methodology	4	-	-	4	4	60
2	PPHD115	Quantitative Techniques	3	-	-	3	3	45
3	PPHD117	Introduction to Pedagogy and Teaching	2	-	-	2	2	30
4	PPHD907A	Research and Publication Ethics	2	-	-	2	2	30
5	PHDMO__	Discipline Specific Course (Online Mode)	-	-	-	3	-	45
Total Credits						**14**		

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DETAILED SYLLABUS

COURSE CODE: PPHD113	COURSE TITLE: RESEARCH METHODOLOGY	L	T	P	C
		4	-	-	4

Course Perspective:
This course Equips the participants with fundamental concepts, frameworks, Models, techniques and methods for conducting research for generating required information and knowledge. Research is important for generating required information for decision making and creating new knowledge irrespective of the nature of decision & curiosity. The quality of decision & knowledge created, in any context and at any level, is influenced by the "accuracy, updated and completeness of information". Any knowledge or information generated through research must have logic and scientific approach. Therefore, identifying the type of knowledge or information required in the given context, the choices of methods used for data collection & analysis etc. is prerequisite to meet the purpose of research. The methodology for creating new information or Knowledge is a paramount learning requirement for any researcher & decision maker.

Course Outcomes: By the end of the course, students will be:

CO1: Understanding the research terms, concepts, methodology and methods for research design, data collection, data analysis and writing report.
CO2: Applying the research concepts, research methods, research design, research ethics and analytical tools.
CO3: Analysing the existing literature, research situations, and research methods.
CO4: Evaluating the various options and selecting correct methods.
CO5: Developing the research design, research proposal and research report.

Course Outline:

Unit I: Introduction to Research Methodology (15 contact hours)
- Meaning, Purpose, and Dimensions of Research Terms.
- Research Problems, Variables, Operational Definitions
- Ethics in Research, Case Study
- Research Paradigms: Quantitative, Qualitative, Mixed Methods
- Types of Research: Basic, Applied, Descriptive, Analytical, Historical etc.
- Literature review: Conceptual and research models, systematic review and softwares used.
- Identifying research questions, research gaps, research objectives
- Hypothesis Formulation and Testing

Unit II: Research Design and Methods (15 contact hours)
- Concepts of Research design, terms related to research design.
- Types of research designs and making a choice of research design.
- Exploratory Research Design Concepts
- Descriptive Research Designs – concept, types and uses
- Experimental Design: Concept of Independent & Dependent variables.
- Types of Experimental Designs and Quasi-Experimental Designs and related terminology.
- Writing Research Proposals

Unit III: Data Collection Methods (10 contact hours)
- Data Collection Tools: Interviews, Surveys, Questionnaires, Case Studies
- Conducting Field Research
- Designing a Questionnaires for data collection.
- Validity and Reliability of the Questionnaires.
- Sampling fundamentals: Population, Sampling theory, Central Limit theorem, Sampling terms, types of samples: Probability and Non-probability, Sampling Procedure, Constructing a range using sampling mean.
- Types of data: Parametric and non-parametric data, scaling techniques.

- Data analysis: Descriptive and inferential statistics, how to select statistical tools.
- Types of statistical tools: Univariate, Bivariate, and Multivariate.

Unit IV: Writing and Presenting Research Report (20 contact hours)

- Structuring a Research Report
- Writing a Literature Review and Critical Analysis
- Citations and Referencing Styles
- Presentation Skills
- Publishing Research Findings

Textbook:

- Cooper D. R. and Schindler P. S. "Research Methodology in Management" McGraw Hill.

Reference Books:

- William G. Zikmund, " Research Methodology in Management" Cenage Learning.
- Naresh K. Malhotra, " Marketing Research" Pearson Education.
- Resnik, David B. "The Ethics of Research."
- Denzin, Norman K., and Yvonna S. Lincoln. "Handbook of Qualitative Research."
- Sapsford, Roger, and Victor Jupp. "Data Collection and Analysis."
- Snedecor, George W., and William G. Cochran. "Statistical Methods."
- Belcher, Wendy Laura. "Writing Your Journal Article in Twelve Weeks."
- Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. "The Craft of Research."

ASSESSMENT PLAN

Assessment Type	Description	Weightage (%)
Literature Review Assignment	Write a comprehensive literature review on a selected topic	10%
Mid-term Exam	Covers Units I and II	20%
Research Proposal and Data Collection Assignment	Develop a detailed research proposal based on a chosen topic	15%
Final Exam	Covers all units, with a focus on Units III and IV	50%
Class Participation	Active involvement in class discussions and activities	5%

Total: 100%

DETAILED ASSIGNMENTS

1. **Research Proposal**
   - **Objective:** To develop a detailed research proposal on a chosen topic.
   - **Instructions:**
     - Select a research topic relevant to your field of study.
     - Prepare a comprehensive research proposal that includes the following sections:
       - **Introduction and Background:** Provide an overview of the research topic, its significance, and context. (500-700 words)
       - **Research Objectives and Questions:** Clearly state the objectives of the research and the research questions you aim to address. (200-300 words)
       - **Literature Review:** Conduct a thorough review of existing literature related to your topic. Summarize key findings, identify gaps, and position your research within the existing body of knowledge. (1000-1200 words)
       - **Methodology:** Describe the research design, data collection methods, and data analysis plan. Include details on sampling, instruments, and procedures. (1000-1200 words)
       - **Ethical Considerations:** Discuss any ethical issues related to your research and how you plan to address them. (200-300 words)
       - **Timeline and Budget (if applicable):** Provide a timeline for the research activities and a budget outline if applicable. (200-300 words)
     - Format: Use APA style for citations and references.
     - Length: 3000-4000 words.
     - **Due Date:** Week 10.
2. **Data Collection Assignment**
   - **Objective:** To conduct a small-scale data collection and analyze its validity and reliability.
   - **Instructions:**
     - Design a data collection exercise using either interviews or surveys.
     - **Part 1: Data Collection Design:**
       - Describe the data collection method you chose (interviews or surveys) and justify your choice. (200-300 words)
       - Develop an interview guide or survey questionnaire with at least 10 questions.
       - Explain the sampling strategy and sample size. (200-300 words)
     - **Part 2: Data Collection:**
       - Conduct the data collection with a minimum of 10 participants.
       - Record and transcribe the interviews or compile the survey responses.
     - **Part 3: Analysis:**
       - Analyze the collected data and discuss its validity and reliability. (500-700 words)
       - Reflect on the data collection process and any challenges faced. (300-500 words)
     - Format: Use APA style for citations and references.
     - Length: 1500-2000 words.
     - **Due Date:** Week 12.
3. **Literature Review Assignment**
   - **Objective:** To write a comprehensive literature review on a selected topic.
   - **Instructions:**
     - Choose a research topic and conduct a thorough literature review.
     - **Part 1: Introduction:**
       - Introduce the topic and explain its significance. (200-300 words)
     - **Part 2: Summary of Literature:**
       - Summarize and analyze the existing literature related to your topic. (1200-1500 words)
       - Identify key themes, trends, and gaps in the literature.
     - **Part 3: Conclusion:**
       - Summarize the main findings of your literature review and discuss the implications for future research. (200-300 words)

- Format: Use APA style for citations and references.
- Length: 2000-2500 words.
- **Due Date:** Week 8.

COURSE CODE: PPHD115	COURSE TITLE: QUANTITATIVE TECHNIQUES	L	T	P	C
		3	-	-	3

Course Perspective:

This course is designed to provide students with a comprehensive understanding of quantitative research techniques, emphasizing their practical application in data-driven decision-making. By integrating fundamental concepts with hands-on statistical analysis, students will be equipped to not only interpret complex data but also present findings effectively using descriptive and inferential methods. The course promotes critical thinking by guiding students through various hypothesis testing techniques and advanced statistical methods like ANOVA and regression analysis. Practical sessions with tools such as SPSS will ensure that students are industry-ready and capable of leveraging quantitative techniques for real-world research scenarios.

Course Outcomes: By the end of the course, students will be:

CO1: Understanding the fundamental concepts and importance of quantitative research and different types of quantitative data.
CO2: Applying the descriptive statistical and inferential techniques and represent data effectively using various visualization tools like histograms, bar charts, and pie charts etc.
CO3: Analyzing the research content, situations, relevant tools and methods of research.
CO4: Evaluating the options in methods and tools for research and taking decisions.

Course Outline:

Unit I: Introduction to Quantitative Techniques (15 contact hours)

- Basics of Quantitative Research.
- Importance and Applications of Quantitative Techniques.
- Understanding different types of Quantitative Data Distributions: Chi-Square Distribution, Normal Distribution, Poisson Distribution, Binomial Distribution and Exponential Distribution etc.
- Importance of Normal/Bell Curve.

Unit II: Descriptive Statistics (15 contact hours)

- Measures of Central Tendency: Mean, Median, Mode
- Measures of Dispersion: Range, Variance, Standard Deviation
- Data Visualization: Histograms, Bar Charts, Pie Charts, etc.

Unit III: Inferential Statistics (15 contact hours)

- Hypothesis Formulation Testing: Null and Alternative Hypotheses, Hypothesis testing procedure
- Parametric test: t-test and its assumptions
- Non-parametric test: Chi-Square Test and others
- Assumptions for using parametric statistical tests.

Unit IV: Advanced Statistical Techniques (15 contact hours)

- Correlation and Regression Analysis
- Analysis of Variance (ANOVA), F-test
- Introduction to SPSS, Data Analysis using SPSS
- Introduction to Multivariate tests and Analysis using SPSS

Textbook:

- Lind, Douglas A., William G. Marchal, and Samuel A. Wathen. "Statistical Techniques in Business and Economics."

Reference Book:

- Snedecor, George W., and William G. Cochran. "Statistical Methods."
- Agresti, Alan. "Statistical Methods for the Social Sciences."
- Field, Andy. "Discovering Statistics Using SPSS."
- Dalgaard, Peter. "Introductory Statistics with R."

ASSESSMENT PLAN

Assessment Type	Description	Weightage (%)
SPSS Project	Analyze a dataset using SPSS and write a report on the findings	10%
Mid-term Exam	Covers Units I and II, including SPSS basics	20%
Descriptive Statistics Assignment	Solve problems related to measures of central tendency, dispersion, and data visualization	10%
Inferential Statistics Assignment	Conduct hypothesis tests and interpret results	5%
Final Exam	Covers all units, with a focus on inferential and advanced statistical techniques	50%
Class Participation	Active involvement in class discussions and activities	5%

Total: 100%

DETAILED ASSIGNMENTS

1. **SPSS Project**
   - **Objective:** To analyze a dataset using SPSS and write a report on the findings.
   - **Instructions:**
     - Obtain a dataset relevant to your field of study or use a provided dataset.
     - **Part 1: Data Description and Preparation:**
       - Describe the dataset, including variables and sample size. (200-300 words)
       - Perform data cleaning and preparation (e.g., handling missing values, coding variables). (200-300 words)
     - **Part 2: Descriptive Statistics:**
       - Calculate and interpret measures of central tendency (mean, median, mode) and dispersion (range, variance, standard deviation). (300-400 words)
       - Create and interpret visualizations (histograms, bar charts, pie charts). (300-400 words)
     - **Part 3: Inferential Statistics:**
       - Conduct hypothesis tests (e.g., t-tests, chi-square tests) and interpret the results. (300-400 words)
     - **Part 4: Correlation and Regression Analysis:**
       - Perform correlation and regression analysis and interpret the findings. (300-400 words)
     - **Part 5: Conclusion:**
       - Summarize the key findings and discuss their implications. (200-300 words)
     - Format: Use APA style for citations and references.
     - Length: 2000-2500 words.
     - **Due Date:** Week 10.
2. **Descriptive Statistics Assignment**
   - **Objective:** To solve problems related to measures of central tendency, dispersion, and data visualization.
   - **Instructions:**
     - Complete the following tasks:
       - Calculate mean, median, and mode for a given dataset.
       - Calculate range, variance, and standard deviation for the dataset.
       - Create histograms, bar charts, and pie charts for the dataset.
       - Interpret the results and provide a brief explanation of what they indicate about the data.
     - Format: Present calculations and visualizations clearly and concisely.
     - Length: 1500-2000 words.
     - **Due Date:** Week 6.
3. **Inferential Statistics Assignment**
   - **Objective:** To conduct hypothesis tests and interpret results.
   - **Instructions:**
     - Complete the following tasks:
       - State the null and alternative hypotheses for each test.
       - Perform t-tests and z-tests on given datasets using SPSS.
       - Conduct chi-square tests on given datasets using SPSS.
       - Interpret the results and discuss their significance.
     - Format: Present calculations and interpretations clearly and concisely.
     - Length: 1500-2000 words.
     - **Due Date:** Week 8.

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COURSE CODE: PPHD117	COURSE TITLE: INTRODUCTION TO PEDAGOGY AND TEACHING	L	T	P	C
		2	-	-	2

Course Perspective:

This course is important for anyone who wants to be teacher because it equips the individuals with conceptual framework, approaches, methods, & models for Teaching -Learning process. For effective teaching – learning it is essential that both science and art are used. A good teacher always uses rationale or logic for the various choices one makes about why one teaches (the philosophy), what will one teach (the curriculum/syllabus), how he/she is going to teach (various methods & techniques) and measuring the actual learning (assessment strategy). The teacher must be able to bring alignment among these elements in T-L process to the top-level goals (Learning outcomes). The learning happens, only when it is student- centered. Additionally, a teacher must use his art (the style, motivation & involvement) in the classroom while teaching & engaging students. Therefore, its essential for an effective teacher to have education philosophy, to learn how to design curriculum, decide his/her approach to T-L process, & what methods to use inside classroom & outside classroom. Finally, one need to learn to develop a strategy for how to measure learning. This science aspect must be complemented by the art i.e. develop the abilities to deliver effectively in the classroom so that desired learning happens.

Course Outcomes: By the end of the course, students will be:

CO1: Understanding the foundational concepts of pedagogy, learning theories, curriculum designs, teaching and assessment methods.

CO2: Applying an instructional plan that integrates various teaching methods and aligns with specific curriculum goals, demonstrating effective planning and assessment techniques.

CO3: Analyzing the different classroom situations and various methods for teaching and assessment.

CO4: Evaluating the effectiveness of peer teaching sessions, based on established criteria for lesson delivery and student engagement. Identify the most effective approaches for diverse learning environments.

CO5: Creating a comprehensive lesson plan incorporating diverse teaching strategies, assessment methods, and classroom management techniques that addresses various learning needs and reflect on its effectiveness.

Course Outline:

Unit I: Education (9 contact hours)

- Meaning of Education and source of the word "Education".
- Approaches to Education: Outcome Based Education (OBE) and Input Based Education (IBE).
- Learning Domains: Holistic Learning
- Understanding differences among: Data, Information, Knowledge, Intelligence, and wisdom
- Introduction to Methods of Learning: Pedagogy, Andragogy and Heutagogy
- Learning Theories: Behaviorism, Cognitivism, Constructivism
- Laws of Learning and Steps (Sequences) in learning
- Types/Levels of knowledge and its relevance to teaching methods.
- Teaching Methods: Student Centered Methods, Teacher Centered Methods

Unit II: Curriculum Development and Instructional Design (9 contact hours)

- Education Philosophy and Curriculum Design
- Principles of Curriculum Design
- Types of Curriculum Design and Models of Curriculum Design.
- Curriculum Planning and Development
- Designing Instructional Plans

- Designing Curriculum in the NEP-2020 context.
- Assessment and Evaluation Methods

Unit III: Classroom Management and Student Engagement (6 contact hours)

- Classroom Management Techniques
- Classroom layout
- Black/white board management.
- Aligning uses of White/Black board and technology to the learning outcomes.
- Strategies for Student Engagement
- Addressing Diverse Learning Needs

Unit IV: Practical Teaching Experience (6 contact hours)

- Designing Programme Learning Outcomes and Course Learning Outcomes.
- Structuring the student learning experience.
- Developing a learning plan align to learning outcomes.
- Lesson Planning and Delivery.
- Peer Teaching and Feedback.
- Reflective Teaching Practices.
- Practical Teaching Experience (Submit experience certificate from a school/college for 20-30 hrs).

Textbooks:

- Borich, Gary D. "Effective Teaching Methods: Research-Based Practice."

Suggested Readings:

- Marzano, Robert J. "The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction."
- Brookfield, Stephen D. "The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom."
- Biggs, John, and Catherine Tang. "Teaching for Quality Learning at University."

Registrar
K R Mangalam University
Sohna Road, Gurugram (Haryana)

ASSESSMENT PLAN

Assessment Type	Description	Weightage (%)
Curriculum Development Project	Develop a curriculum plan for a selected course or module	10%
Mid-term Exam	Covers Units I and II	20%
Classroom Management Assignment	Create a classroom management plan and strategies for student engagement	10%
Peer Teaching Exercise	Conduct a teaching session and receive feedback from peers	5%
Final Exam	Covers all units, with a focus on practical teaching techniques and reflective practices	50%
Class Participation	Active involvement in class discussions and activities	5%

Total: 100%

DETAILED ASSIGNMENTS

1. **Curriculum Development Project**
   - **Objective:** To develop a curriculum plan for a selected course or module.
   - **Instructions:**
     - Select a subject area and develop a comprehensive curriculum plan. The project should include:
       - **Course Objectives and Outcomes:** Clearly state the objectives and expected outcomes of the course. (200-300 words)
       - **Weekly Lesson Plans:** Provide a detailed weekly lesson plan, including topics covered, learning activities, and assessment methods. (1500-2000 words)
       - **Assessment Methods and Tools:** Describe the assessment methods and tools used to evaluate student learning. (300-400 words)
       - **Teaching and Learning Resources:** List the resources (e.g., textbooks, articles, multimedia) that will be used in the course. (200-300 words)
     - Format: Use APA style for citations and references.
     - Length: 2500-3000 words.
     - **Due Date:** Week 10.
2. **Classroom Management Assignment**
   - **Objective:** To create a classroom management plan and strategies for student engagement.
   - **Instructions:**
     - Develop a comprehensive classroom management plan. The assignment should include:
       - **Classroom Rules and Procedures:** Outline the rules and procedures for maintaining classroom discipline. (300-400 words)
       - **Management Techniques:** Describe techniques for managing classroom behavior and promoting a positive learning environment. (300-400 words)
       - **Student Engagement Strategies:** Discuss strategies for engaging students and encouraging active participation. (300-400 words)
       - **Addressing Diverse Learning Needs:** Explain methods for accommodating diverse learning styles and needs. (300-400 words)
     - Format: Use APA style for citations and references.
     - Length: 1500-2000 words.
     - **Due Date:** Week 8.
3. **Peer Teaching Exercise**
   - **Objective:** To conduct a teaching session and receive feedback from peers.
   - **Instructions:**
     - Prepare a teaching session on a selected topic, including:
       - **Lesson Plan:** Develop a detailed lesson plan outlining the objectives, activities, and assessment methods. (200-300 words)
       - **Teaching Materials:** Prepare any materials needed for the session (e.g., slides, handouts).
       - **Delivery:** Conduct a 15-minute teaching session with your peers.
       - **Feedback:** Receive feedback from your peers and the instructor.
       - **Reflection:** Write a reflection on the teaching experience, including strengths, areas for improvement, and lessons learned. (500-700 words)
     - **Due Date:** Week 12.

COURSE CODE: PPHD907A	COURSE TITLE: RESEARCH AND PUBLICATION ETHICS	L	T	P	C
		2	-	-	2

Course Perspective:

In today's academic landscape, research ethics has become a highly relevant topic. While conducting research can be exciting, it also presents numerous ethical challenges, such as managing bias, avoiding plagiarism, addressing conflicts of interest, preventing falsification of results, ensuring informed consent, determining fair authorship, and maintaining the integrity of peer review and publication processes. This course combines theoretical foundations with practical applications to equip students with the tools to critically analyze research philosophy, ethics, and case studies independently. From a pedagogical perspective, students will learn to navigate and assess research projects from the initial stage of identifying ethical standards to the final stages of publication. Additionally, the course encourages students to reflect on the influence of emerging technologies and social trends on research ethics, prompting them to explore new codes of conduct that can effectively regulate multidisciplinary research.

Pedagogy:
Class room teaching, guest lectures, group discussions, and practical sessions.

Evaluation:
Continuous assessment will be done through tutorials, assignments, quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.

Course outcome: By the end of the course, students will be:

CO1: Understanding the basic concepts of philosophy and ethics, including their definitions, nature, branches, and significance in research and publication contexts.

CO2: Applying the ethical guidelines and standards (such as COPE, WAME) in evaluating and managing publication practices and research integrity.

CO3: Analyzing the research situations and scenarios, instances of scientific misconduct, such as fabrication, falsification, plagiarism, and redundant publications, and discuss their impact on the scientific community.

CO4: Evaluating the role of open-access publishing and research metrics (such as h-index, Impact Factor, and altmetrics) in enhancing the visibility and credibility of research outputs.

CO5: Creating a comprehensive strategy or framework for maintaining ethical standards in research, including the use of plagiarism detection software, understanding conflicts of interest, and addressing publication misconduct.

Syllabus in Details

RPE 01: Philosophy and Ethics (3 hrs.)
1. Introduction to philosophy: definition, nature and scope, concept, branches
2. Ethics: definition, moral philosophy, nature of moral judgements and reactions

RPE 02: Scientific conduct (5hrs.)
1. Ethics with respect to science and research
2. Intellectual honesty and research integrity
3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
4. Redundant publications: duplicate and overlapping publications, salami slicing
5. Selective reporting and misrepresentation of data

RPE 03: Publication Ethics (7 hrs.)

1. Publication ethics: definition, introduction and importance
2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
5. Violation of publication ethics, authorship and contributorship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

PRACTICE

RPE 04: Open Access Publishing (4 hrs.)

1. Open access publications and initiatives
2. SHERPA/ROMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder/journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

RPE 05: Publication Misconduct (4hrs.)

A. Group Discussions (2 hrs.)

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

1. Use of plagiarism software like Turnitin, Urkund and other open source software tools

RPE 06: Databases and Research Metrics (7hrs.)

A. Databases (4 hrs.)

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics (3 hrs.)

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics: h-index, g index, i10 index, altmetrics

References:

1. Bird, A. (2006). Philosophy of Science. Routledge. MacIntyre, Alasdair (1967) A Short History of Ethics. London.
2. P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
3. National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press. Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10.
   Retrieved from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. https://doi.org/10.1038/489179a
4. Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019), ISBN:978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics Book.pdf

Assessment Plan

Assessment Type	Description	Weightage (%)
Case Study Analysis	Analyze a case study on research misconduct and present findings	10%
Mid-term Exam	Covers Units I and II	20%
Ethical Guidelines Assignment	Develop a set of ethical guidelines for a research project	10%
Plagiarism Detection Exercise	Identify instances of plagiarism in sample texts and propose corrections	5%
Final Exam	Covers all units, with a focus on ethical publishing practices	50%
Class Participation	Active involvement in class discussions and activities	5%

Total: 100%

Detailed Assignments

1. **Case Study Analysis**
   - **Objective:** To analyze a case study on research misconduct and present findings.
   - **Instructions:**
     - You will be provided with a detailed case study involving research misconduct.
     - **Part 1: Summary of the Case:**
       - Summarize the key facts and events of the case. (300-400 words)
     - **Part 2: Identification of Ethical Issues:**
       - Identify and explain the ethical issues involved in the case. (400-500 words)
     - **Part 3: Analysis of Consequences:**
       - Analyze the consequences of the misconduct for the individuals and institutions involved. (300-400 words)
     - **Part 4: Recommendations:**
       - Provide recommendations for preventing similar misconduct in the future. (400-500 words)
     - Format: Use APA style for citations and references.
     - Length: 2000-2500 words.
     - **Due Date:** Week 8.
2. **Ethical Guidelines Assignment**
   - **Objective:** To develop a set of ethical guidelines for a research project.
   - **Instructions:**
     - Select a research topic and develop comprehensive ethical guidelines. The assignment should include:
       - **Ethical Considerations:** Discuss the ethical considerations relevant to the research topic. (300-400 words)
       - **Guidelines for Conducting Ethical Research:** Outline guidelines for ensuring ethical conduct in the research. (400-500 words)
       - **Confidentiality and Consent:** Explain how you will ensure participant confidentiality and obtain informed consent. (300-400 words)
     - Format: Use APA style for citations and references.
     - Length: 1500-2000 words.
     - **Due Date:** Week 10.
3. **Plagiarism Detection Exercise**
   - **Objective:** To identify instances of plagiarism in sample texts and propose corrections.
   - **Instructions:**
     - You will be provided with sample texts containing instances of plagiarism.
     - **Part 1: Identification:**
       - Identify the plagiarized content in the sample texts. Highlight and annotate the plagiarized sections. (300-400 words)
     - **Part 2: Explanation:**
       - Explain why the highlighted content constitutes plagiarism. (300-400 words)
     - **Part 3: Corrections:**
       - Propose corrections by properly citing sources or paraphrasing the content. (300-400 words)
     - **Part 4: Reflection:**
       - Reflect on the importance of avoiding plagiarism and maintaining academic integrity. (300-400 words)
     - Format: Use APA style for citations and references.
     - Length: 1500-2000 words.
     - **Due Date:** Week 12.

PHDMO____	DISCIPLINE SPECIFIC COURSE (ONLINE MODE)	L	T	P	C
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Note: Research Scholars are required to study one Online Discipline Specific Course as suggested by the Research Advisory Committee (RAC), and the evaluation of this exam will be conducted by the Ph.D. Cell as per the examination schedule.